CLAIMS

1. An implantable medical device comprising:

a) a microprocessor-based controller;

b) a memory controlled by the microprocessor-based controller;

c) means for sensing at least one of respiratory related activity and heart sounds; and

d) means responsive to a predetermined event for storing data pertaining to the sensed one of respiratory related activity and heart sounds in the memory.

2. The implantable medical device of claim 1 and further including a telemetry link in the device for transferring out the stored data to an external monitor.

3. The implantable medical device of claim 1 wherein the means for sensing is an accelerometer responsive to heart sounds.

4. The implantable medical device of claim 1 wherein the means for sensing senses variations in transthoracic impedance due to respiratory activity.

5. The implantable medical device of claim 1 wherein the predetermined event for storing data pertaining to sensed respiratory related activity is the occurrence of a predetermined respiratory pattern.

6. The implantable medical device of claim 5 wherein the predetermined respiratory pattern is Cheyne-Stokes respiration.

7. The implantable medical device of claim 5 wherein the predetermined respiratory pattern is apnea.

8. The implantable medical device of claim 1 wherein the predetermined event for storing data pertaining to sensed heart sounds is an occurrence of atrial fibrillation.

9. The implantable medical device of claim 1 wherein the predetermined event is dyssynchrony between the left and right ventricular contractions.

10. The implantable medical device of claim 1 wherein the predetermined event for storing data related to heart sounds comprises exercise induced heart rate of a patient in whom the device is implanted reaching a predetermined value.

11. The implantable medical device as in claim 1 wherein the predetermined event for storing data related to heart sounds comprises a detection of intrinsic cardiac depolarization signals exhibiting a predetermined anomaly.

12. The implantable medical device as in claim 11 wherein the predetermined anomaly comprises atrial fibrillation.

13. The implantable medical device as in any one of claims 1-11 wherein the microprocessor-based controller is a component of a medical device selected from a group consisting of bradycardia pacers, antitachy pacers, cardioverter defibrillators and diagnostic-only devices.

14. A method of storing at least one of polysomnograph data and phonocardiogram data in a memory of an implantable medical device comprising the steps of:

a) implanting in a patient a medical device having a controller with a memory for storing data and at least one sensor for detecting a physiologic parameter relating to one of respiratory activity and heart sounds and producing an electrical signal proportional to the sensed physiologic parameter;

b) detecting a predetermined event; and

c) storing a selected one of polysomnograph data derived from the detected respiratory activity and phonocardiograph data derived from heart sounds in the memory upon detection of said predetermined event.

15. The method of claim 12 wherein the predetermined event triggering storage of polysomnograph data is detection of a predetermined respiratory pattern.

16. The method of claim 14 wherein the predetermined event triggering storage of phonocardiograph data is detection of the patient's heart rate above a predetermined value.

17. The method of claim 14 wherein the predetermined event triggering storage of phonocardiograph data is detection of atrial fibrillation in the patient.